

*** Must show work OR explain why you chose the answer you did to receive ANY CREDIT!

1. Amanda left her downtown office and rode a bus at an average speed of 20 miles per hour to a parking lot where her car was parked. She drove home at an average speed of 50 miles per hour. The entire distance she traveled was 75 miles and the time spent riding the bus and driving home was 2 hours. Which of the following measures is closest to the distance from the parking lot to her house?

- | | |
|------------|------------|
| a 20 miles | c 58 miles |
| b 35 miles | d 72 miles |

2. The label on a cereal box states the following:

- One serving of cereal contains 17 grams of carbohydrates.
- This is 6% of the maximum amount of carbohydrates that a person should eat daily.

Based on the information, which of the following is closest to the maximum amount of carbohydrates that a person should eat in a day?

- | | |
|--------------|-------------|
| a 1.02 grams | c 102 grams |
| b 2.83 grams | d 283 grams |

3. Which of the following defines the solution set for the inequality shown below?

$$-2x + 3 \geq 6$$

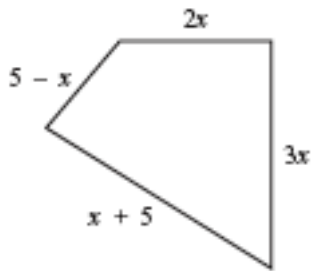
- | | |
|-------------------------|-------------------------|
| a $x \geq -\frac{9}{2}$ | c $x \geq -\frac{3}{2}$ |
| b $x \leq -\frac{9}{2}$ | d $x \leq -\frac{3}{2}$ |

4. What are the solutions of the equation below?

$$p^2 + 5 = 6p$$

- | | |
|-----------|-------------|
| a 1 and 5 | c -1 and -5 |
| b 2 and 3 | d -2 and -3 |

5. A polygon and expressions representing its dimensions, in meters, are shown below. What is the perimeter of the polygon?



- a $5x$
b $15x$
c $5x + 10$
d $7x + 10$
6. The slope of a line is $\frac{1}{3}$. The line contains the point $(6,5)$. Which of the following are the coordinates of another point on the line?

- a $(3,4)$
b $(3,6)$
c $(7,2)$
d $(7,8)$

7. The first five numbers of a quadratic sequence are shown below.

4, 6, 11, 19, 30, ...

What is the next number in the sequence?

- a 44
b 43
c 42
d 41

8. What is the value of the expression below?

$$-7|2^4 - 10| + 3$$

- a -53
b -39
c 17
d 45

9. Which measurement is a reasonable weight for an adult elephant?

- a 450 kg
b 4500 kg
c 45,000 kg
d 450,000 kg